SECTION 4
DIVISION DESIGN CONTROL PROCESS

1. General Policy. The Division plans and controls its design process through identification of design activities, assignment of responsibilities, and definition and control organizational interfaces. Design input is formally documented, reviewed, and verified for technical and administrative accuracy and completeness. The designs (design outputs) are validated that they meet sponsor/customer requirements before release to production and/or delivery to the sponsor/customer. Design changes are controlled.

2. General Guidelines. Procedure SOP D65-04-01, Division Design Control, defines the design and development control process.

3. Design Input. The Division staff or branch POC, usually the program manager or project engineer, prepares a brief from the sponsor/customer Tasking Agreement Form (TAF) or similar formal tasking document. The brief contains all relevant design input information and specifications for the product/service. Procedure SOP D65-04-01 contains the requirements for the tasking/design brief.

4. Design Planning. The program manager or project engineer plans the design effort, assigns the design activities, and establishes the project or program plan for the design which includes the performing functions/organizations and interfaces.

5. Design Verification/Validation. As a minimum, every design is verified and validated by conducting and recording Preliminary and Final Design Reviews (PDRs and FDRs). If required, qualification tests and “prototype” demonstrations are performed. Procedure SOP D65-04-01 describes the design verification/validation activities.

6. Design Output. Design output is documented at two levels. Primary output uses drawing and specifications to define the designed product, while the secondary output supports the design with calculations, analysis, and other evaluations needed to validate the design concept. We check and approve design output documents before we release them for production. Procedure SOP D65-04-01 defines the design output control process.

7. Design Changes. Design changes are requested and initiated using Engineering Change Request (ECR) forms. Any Division staff function or branch may establish ECRs. The ECR provides design input for designing the change. Planning, design, and design verification/validation activities adhere to the same rules that apply to original designs, as documented in Procedure SOP D65-04-01.